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File 348:EUROPEAN PATENTS 1978-2003/Apr W01
         (c) 2003 European Patent Office
File 349:PCT FULLTEXT 1979-2002/UB=20030417,UT=20030410
         (c) 2003 WIPO/Univentio
? ds

Set      Items     Description
S1       11244     (RENDER? OR CREAT? OR GENERAT? OR COMPOS?)(5N)GRAPHIC?
S2         454     (POLYGON? OR TRIANGLE?)(5N)MESH?
S3        8705     (SILHOUETTE OR SHARP OR DISCONTINUITY?)(5N)EDGES
S4           8     (DELET? OR OMITTING OR EDIT?)(5N)CONCAVE
S5         112     (DETECT? OR FIND? OR LOCAT? OR SORT OR SORTING)(3N)S3
S6         379     OVERDRAW? OR OVER()DRAW?
S7          80     (ANTIALIAS? OR ANTI-ALIAS?)(5N)IMAGE?
S8           0     CRAWLING()JAGGIES
S9        3091     (BLEND? OR SHADING OR SMOOTH?)(5N)EDGES
S10        255     AU=(SANDER, P? OR SANDER P? OR HOPPE H? OR HOPPE, H? OR SN-
                   YDER, J? OR SNYDER J? OR GORTLER S? OR GORTLER, S?)
S11      10210     IC=(G06T? OR G06G?)
S12          0     S1(S)S2(S)S3(S)S4
S13          0     S1(S)S2(S)S3
S14         33     S1(S)S2
S15          0     S14(S)S6
S16          1     S14(S)(S7 OR S9)
S17          0     S2(S)S6
S18          0     S3(S)S6
S19          6     S2 AND S10
S20          0     S19 NOT S14
S21         32     S14 NOT S16
S22          1     S14(S)SILHOUETTE
S23          1     S22 NOT (S16 OR S19)
```

00566667   **Image available**
ADVANCED DEFERRED SHADING GRAPHICS PIPELINE PROCESSOR
PROCESSEUR PIPELINE GRAPHIQUE EVOLUE A OMBRAGE DIFFERE

Patent Applicant/Assignee:
  APPLE COMPUTER INC, 1 Infinite Loop, Cupertino, CA 95014-2084, US, US
    (Residence), US (Nationality)

Inventor(s):
  DULUK Jerome F Jr, 950 North California Drive, Palo Alto, CA 94303, US,
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  CUAN George, 798 Lusterleaf Drive, Sunnyvale, CA 94086, US,
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  HONG Bor-Shyue, 2325 Oak Flat Road, San Jose, CA 95131, US,
  MAMMEN Abraham, 2780 Lylewood Drive, Pleasanton, CA 94588, US,
  RASHID Abbas, 34369 Eucalyptus Terrace, Fremont, CA 94555-1982, US,
  TSAY Albert Suan-Wei, 38129 Cambridge Court, Fremont, CA 94536, US,

Legal Representative:
  ANANIAN R Michael (et al) (agent), Flehr Hohbach Test Albritton & HerberT
    LLP, Suite 3400, 4 Embarcadero Center, San Francisco, CA 94111-4187, US
    ,

Patent and Priority Information (Country, Number, Date):
  Patent: WO 200030040 A1 20000525 (WO 0030040)
  Application: WO 99US18971 19990820 (PCT/WO US9918971)
  Priority Application: US 9897336 19980820; US 98213990 19981217
Designated States: AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE
  ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT
  LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT
  UA UG UZ VN YU ZA ZW
  (EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE
  (OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG
  (AP) GH GM KE LS MW SD SL SZ UG ZW
  (EA) AM AZ BY KG KZ MD RU TJ TM
Publication Language: English
Filing Language: English
Fulltext Word Count: 180456

Fulltext Availability:
  Detailed Description

Detailed Description
  ... 13, which has four primitives (primitives A, B, C, and D) for a

particular sample, **rendered** in the following order (starting with a depth clear and with depth test set to...computed for the CHSR process are the same as those computer in the z-buffered **blend** (i.e., the Pixel Block) because inconsistencies 1 0 could cause rendering errors.

In the...

?

21/3,K/1   (Item 1 from file: 348)

01450611
System and method for modeling graphics objects
System und Verfahren zur Modellierung von Graphikobjekten
Systeme et procede de modelisation d'objets graphiques
PATENT ASSIGNEE:
  MITSUBISHI DENKI KABUSHIKI KAISHA, (208589), 2-3, Marunouchi 2-chome,
    Chiyoda-ku, Tokyo 100-8310, (JP), (Applicant designated States: all)
INVENTOR:
  Perry, Ronald N., 28 Maple Ave., Apt. 1, Cambridge, MA 02139, (US)
  Frisken, Sarah F., 28 Maple Ave., Apt. 1, Cambridge, MA 02139, (US)
  Pope, Jackson W.J., 15 Russell Road, Westbury Park, Bristol BS6 7UB, (GB)
LEGAL REPRESENTATIVE:
  Pfenning, Meinig & Partner GbR (100967), Mozartstrasse 17, 80336 Munchen,
    (DE)
PATENT (CC, No, Kind, Date): EP 1241627 A2 · 020918 (Basic)
APPLICATION (CC, No, Date):   EP 2002005902 020314;
PRIORITY (CC, No, Date): US 811010 010316
DESIGNATED STATES: AT; BE; CH; CY; DE; DK; ES; FI; FR; GB; GR; IE; IT; LI;
  LU; MC; NL; PT; SE; TR
EXTENDED DESIGNATED STATES: AL; LT; LV; MK; RO; SI
INTERNATIONAL PATENT CLASS: G06T-017/00; G06T-017/20
ABSTRACT WORD COUNT: 62
NOTE:
  Figure number on first page: 1

LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	200238	1468
SPEC A	(English)	200238	5250
Total word count – document A			6718
Total word count – document B			0
Total word count – documents A + B			6718

...SPECIFICATION methods.
    Vertex clustering, as described by Rossignac et al. in
  "Multi-resolution 3D approximations for **rendering** complex scenes,"
  Modeling in Computer **Graphics** : Methods and Applications, pp. 455-465,
  1993, is one decimation method that quickly simplifies mesh...

...formed by replacing each vertex in the original mesh with its cluster in
  the new **mesh** . Degenerate **triangles** are removed where two or more of
  the vertices of an input triangle map to...
...especially when the final number of polygons is much smaller compared to
  the number of **polygons** in the input **mesh** . An additional disadvantage
  of the vertex clustering method is that the entire decimation process
  must...

 21/3,K/2   (Item 2 from file: 348)

01450601
Modeling and combining multiple graphics objects
Modellieren und Verbinden mehrerer Grafikobjekte

Modelisation et combinaison de plusieurs objets graphiques
PATENT ASSIGNEE:
   MITSUBISHI DENKI KABUSHIKI KAISHA, (208589), 2-3, Marunouchi 2-chome,
      Chiyoda-ku, Tokyo 100-8310, (JP), (Applicant designated States: all)
INVENTOR:
   Perry, Ronald N., 28 Maple Avenue, No. 1, Cambridge, MA 02139, (US)
   Frisken, Sarah F., 28 Maple Avenue, No. 1, Cambridge, MA 02139, (US)
LEGAL REPRESENTATIVE:
   Pfenning, Meinig & Partner GbR (100967), Mozartstrasse 17, 80336 Munchen,
      (DE)
PATENT (CC, No, Kind, Date): EP 1241626 A2 020918 (Basic)
APPLICATION (CC, No, Date):   EP 2002005866 020314;
PRIORITY (CC, No, Date): US 810977 010316
DESIGNATED STATES: AT; BE; CH; CY; DE; DK; ES; FI; FR; GB; GR; IE; IT; LI;
   LU; MC; NL; PT; SE; TR
EXTENDED DESIGNATED STATES: AL; LT; LV; MK; RO; SI
INTERNATIONAL PATENT CLASS: G06T-017/00
ABSTRACT WORD COUNT: 93
NOTE:
   Figure number on first page: 1

LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:
Available Text   Language   Update   Word Count
      CLAIMS A   (English)   200238   323
      SPEC A   (English)   200238   5281
Total word count - document A   5604
Total word count - document B   0
Total word count - documents A + B   5604

...SPECIFICATION methods.
   Vertex clustering, as described by Rossignac et al. in
   "Multi-resolution 3D approximations for **rendering** complex scenes,"
   Modeling in Computer **Graphics** : Methods and Applications, pp. 455-465,
   1993, is one decimation method that quickly simplifies mesh...

...formed by replacing each vertex in the original mesh with its cluster in
   the new **mesh** . Degenerate **triangles** are removed where two or more of
   the vertices of an input triangle map to...
...especially when the final number of polygons is much smaller compared to
   the number of **polygons** in the input **mesh** . An additional disadvantage
   of the vertex clustering method is that the entire decimation process
   must...

   21/3,K/3   (Item 3 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS
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01450600
Modeling graphics objects with topological hints
Modellieren von Grafikobjekten mit topologischen Hinweisen
Modelisation d'objets graphiques avec indications topologiques
PATENT ASSIGNEE:
   MITSUBISHI DENKI KABUSHIKI KAISHA, (208589), 2-3, Marunouchi 2-chome,
      Chiyoda-ku, Tokyo 100-8310, (JP), (Applicant designated States: all)
INVENTOR:
   Perry, Ronald N., 28 Maple Avenue, No. 1, Cambridge, MA 02139, (US)
   Frisken, Sarah F., 28 Maple Avenue, No. 1, Cambridge, MA 02139, (US)
   Pope, Jackson W.J., 15 Russell Road, Westbury Park, Bristol BS6 7UB, (GB)

LEGAL REPRESENTATIVE:
  Pfenning, Meinig & Partner GbR (100967), Mozartstrasse 17, 80336 Munchen,
    (DE)
PATENT (CC, No, Kind, Date): EP 1241625 A2 020918 (Basic)
APPLICATION (CC, No, Date): EP 2002005865 020314;
PRIORITY (CC, No, Date): US 810762 010316
DESIGNATED STATES: AT; BE; CH; CY; DE; DK; ES; FI; FR; GB; GR; IE; IT; LI;
  LU; MC; NL; PT; SE; TR
EXTENDED DESIGNATED STATES: AL; LT; LV; MK; RO; SI
INTERNATIONAL PATENT CLASS: G06T-017/00
ABSTRACT WORD COUNT: 113
NOTE:
  Figure number on first page: 1

LANGUAGE (Publication, Procedural, Application): English; English; English
FULLTEXT AVAILABILITY:
Available Text Language   Update   Word Count
      CLAIMS A (English) 200238   375
      SPEC A   (English) 200238   5318
Total word count - document A   5693
Total word count - document B   0
Total word count - documents A + B   5693

...SPECIFICATION methods.
    Vertex clustering, as described by Rossignac et al. in
  "Multi-resolution 3D approximations for **rendering** complex scenes,"
  Modeling in Computer **Graphics** : Methods and Applications, pp. 455-465,
  1993, is one decimation method that quickly simplifies mesh...

...formed by replacing each vertex in the original mesh with its cluster in
  the new **mesh** . Degenerate **triangles** are removed where two or more of
  the vertices of an input triangle map to...
...especially when the final number of polygons is much smaller compared to
  the number of **polygons** in the input **mesh** . An additional disadvantage
  of the vertex clustering method is that the entire decimation process
  must...

 21/3,K/4   (Item 4 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS
(c) 2003 European Patent Office. All rts. reserv.

00952558
PROCESS CONTROL
PROZESSSTEUERVORRICHTUNG
COMMANDE DE PROCEDE
PATENT ASSIGNEE:
  Cyberlife Technology Limited, (2543640), Quern House, Mill Court, Great
    Shelford, Cambridge CB2 5LD, (GB), (Proprietor designated states: all)
INVENTOR:
  GRAND, Stephen, Lewis, The Old Station House Haybridge Wells, Somerset
    BA5 1AQ, (GB)
LEGAL REPRESENTATIVE:
  Robinson, Nigel Alexander Julian (69551), D. Young & Co., 21 New Fetter
    Lane, London EC4A 1DA, (GB)
PATENT (CC, No, Kind, Date): EP 937286 A1 990825 (Basic)
                              EP 937286 B1 020327
                              WO 9820418 980514
APPLICATION (CC, No, Date): EP 96935171 961105; WO 96GB2703 961105
DESIGNATED STATES: DE; FI; FR; GB; IE; IT; NL; SE
INTERNATIONAL PATENT CLASS: G06F-009/46

NOTE:
  No A-document published by EPO
LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:
Available Text Language   Update   Word Count
      CLAIMS B (English)   200213   1108
      CLAIMS B (German)   200213   974
      CLAIMS B (French)   200213   1316
      SPEC B   (English)   200213   17766
Total word count - document A   0.
Total word count - document B   21164
Total word count - documents A + B   21164

...SPECIFICATION Often the system will be used in both modes.
    The output from the system is **rendered** , textured 3D **graphics** and
  stereo sound. Each object in the simulation can have its own 3D **polygon
  mesh** , and thus complex objects can be constructed from several
  articulated or otherwise connected parts, each...three-dimensional
  graphics. Each cell can optionally contain graphical and geographical
  information, and thus be **rendered** to the screen. The **graphical**
  information is in the form of a textured **polyg**on mesh (possibly two
  separate **meshes** , if the object needs to be visible from both inside and
  outside).
    Each polygon may...

  21/3,K/5   (Item 5 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS
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00856424
Selective refinement of meshes
Selektive Verfeinerung der Maschen
Affinement selectif de mailles
PATENT ASSIGNEE:
  MICROSOFT CORPORATION, (749861), One Microsoft Way, Redmond, Washington
    98052-6399, (US), (Applicant designated States: all)
INVENTOR:
  Hoppe Hughes H., 506 E. Howell, Apt. 401, Seattle, Washington 98122, (US)
LEGAL REPRESENTATIVE:
  Meddle, Alan Leonard et al (33761), FORRESTER & BOEHMERT
    Franz-Joseph-Strasse 38, 80801 Munchen, (DE)
PATENT (CC, No, Kind, Date):   EP 789330   A2   970813 (Basic)
                               EP 789330   A3   991103
APPLICATION (CC, No, Date):   EP 97100141 970107;
PRIORITY (CC, No, Date): US 586953 960111
DESIGNATED STATES: DE; FR; GB
INTERNATIONAL PATENT CLASS: G06T-017/20
ABSTRACT WORD COUNT: 158
NOTE:
  Figure number on first page: 8

LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:
Available Text Language   Update   Word Count
      CLAIMS A (English)   9708W2   1044
      SPEC A   (English)   9708W2   16362
Total word count - document A   17406
Total word count - document B   0
Total word count - documents A + B   17406

...SPECIFICATION See, T. Sederberg and S. Parry, Free-form Deformation of
Solid Geometric Models, 1986 Computer **Graphics** Proceedings (FFD);
Rockwood, Real-time **Rendering** of Trimmed Surfaces, 1989 Computer
Graphics Proceedings (NURBS); and J. Blinn, A Generalization of
Algebraic Surface Drawing, 1982 ACM Transactions on...

...1(3)235-256 (Blobbies).) For display purposes, these authored models are
usually tessellated into **triangle meshes** of the type previously
described. Detailed models can also be rapidly obtained by scanning
physical...

21/3,K/6 **(Item 6 from file: 348)**
DIALOG(R)File 348:EUROPEAN PATENTS
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00856423
Meshes with variable resolution
Maschen mit veranderbarer Auflosung
Mailles a resolution variable
PATENT ASSIGNEE:
  MICROSOFT CORPORATION, (749861), One Microsoft Way, Redmond, Washington
    98052-6399, (US), (Applicant designated States: all)
INVENTOR:
  Hoppe, Hugues H., Apt. 401, 506 E. Howell, Seattle, Washington 98122,
  (US)
LEGAL REPRESENTATIVE:
  Meddle, Alan Leonard et al (33761), FORRESTER & BOEHMERT
    Franz-Joseph-Strasse 38, 80801 Munchen, (DE)
PATENT (CC, No, Kind, Date):   EP 789329   A2   970813 (Basic)
                                EP 789329   A3   991103
APPLICATION (CC, No, Date):   EP 97100126 970107;
PRIORITY (CC, No, Date): US 586953 960111
DESIGNATED STATES: DE; FR; GB
INTERNATIONAL PATENT CLASS: G06T-017/20
ABSTRACT WORD COUNT: 158
NOTE:
  Figure number on first page: 8

LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:
Available Text   Language   Update   Word Count
      CLAIMS A   (English)   9708W2   1553
      SPEC A   (English)   9708W2   16361
Total word count - document A   17914
Total word count - document B   0
Total word count - documents A + B   17914

...SPECIFICATION See, T. Sederberg and S. Parry, Free-form Deformation of
Solid Geometric Models, 1986 Computer **Graphics** Proceedings (FFD);
Rockwood, Real-time **Rendering** of Trimmed Surfaces, 1989 Computer
Graphics Proceedings (NURBS); and J. Blinn, A Generalization of
Algebraic Surface Drawing, 1982 ACM Transactions on...

...1(3)235-256 (Blobbies).) For display purposes, these authored models are
usually tessellated into **triangle meshes** of the type previously
described. Detailed models can also be rapidly obtained by scanning
physical...

21/3,K/7   (Item 7 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS
(c) 2003 European Patent Office. All rts. reserv.

00854741
Encoding and transmission of meshes
Maschenubertragung und -kodierung
Codage et transmission de mailles
PATENT ASSIGNEE:
   MICROSOFT CORPORATION, (749861), One Microsoft Way, Redmond, Washington
      98052-6399, (US), (Applicant designated States: all)
INVENTOR:
   Hoppe, Hugues H., 506 E. Howell, Apt. 401, Seattle, Washington 98122,
      (US)
LEGAL REPRESENTATIVE:
   Meddle, Alan Leonard et al (33761), FORRESTER & BOEHMERT
      Franz-Joseph-Strasse 38, 80801 Munchen, (DE)
PATENT (CC, No, Kind, Date):   EP 788072   A2 970806 (Basic)
                               EP 788072   A3 991103
APPLICATION (CC, No, Date):   EP 97100140 970107;
PRIORITY (CC, No, Date): US 586953 960111
DESIGNATED STATES: DE; FR; GB
INTERNATIONAL PATENT CLASS: G06T-017/20
ABSTRACT WORD COUNT: 158
NOTE:
   Figure number on first page: 8

LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:
Available Text   Language   Update   Word Count
      CLAIMS A   (English)   9708W1   2452
      SPEC A   (English)   9708W1   16366
Total word count - document A   18818
Total word count - document B   0
Total word count - documents A + B   18818

...SPECIFICATION See, T. Sederberg and S. Parry, Free-form Deformation of
   Solid Geometric Models, 1986 Computer **Graphics** Proceedings (FFD);
   Rockwood, Real-time **Rendering** of Trimmed Surfaces, 1989 Computer
   Graphics Proceedings (NURBS); and J. Blinn, A Generalization of
   Algebraic Surface Drawing, 1982 ACM Transactions on...

...1(3)235-256 (Blobbies).) For display purposes, these authored models are
   usually tessellated into **triangle** **meshes** of the type previously
   described. Detailed models can also be rapidly obtained by scanning
   physical...

21/3,K/8   (Item 8 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS
(c) 2003 European Patent Office. All rts. reserv.

00850266
Mesh simplification and construction of meshes
Maschenvereinfachtung und Konstruktion von Maschen
Simplification de mailles et construction de mailles
PATENT ASSIGNEE:
   MICROSOFT CORPORATION, (749861), One Microsoft Way, Redmond, Washington
      98052-6399, (US), (Applicant designated States: all)

INVENTOR:
   Hoppe Hughes H., 506 E. Howell, Apt. 401, Seattle, Washington 98122, (US)
LEGAL REPRESENTATIVE:
   Meddle, Alan Leonard et al (33761), FORRESTER & BOEHMERT
      Franz-Joseph-Strasse 38, 80801 Munchen, (DE)
PATENT (CC, No, Kind, Date):   EP 784295   A2   970716 (Basic)
                               EP 784295   A3   991103
APPLICATION (CC, No, Date):   EP 97100127 970107;
PRIORITY (CC, No, Date): US 586953 960111
DESIGNATED STATES: DE; FR; GB
INTERNATIONAL PATENT CLASS: G06T-017/20
NOTE:
   Figure number on first page: 8
LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:
Available Text   Language   Update   Word Count
      CLAIMS A   (English)   EPAB97   990
      SPEC A   (English)   EPAB97   16361
Total word count - document A   17351
Total word count - document B   0
Total word count - documents A + B   17351

...SPECIFICATION See, T. Sederberg and S. Parry, Free-form Deformation of
   Solid Geometric Models, 1986 Computer **Graphics** Proceedings (FFD);
   Rockwood, Real-time **Rendering** of Trimmed Surfaces, 1989 Computer
   Graphics Proceedings (NURBS); and J. Blinn, A Generalization of
   Algebraic Surface Drawing, 1982 ACM Transactions on...

...1(3)235-256 (Blobbies).) For display purposes, these authored models are
   usually tessellated into **triangle meshes** of the type previously
   described. Detailed models can also be rapidly obtained by scanning
   physical...

 21/3,K/9   (Item 1 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT
(c) 2003 WIPO/Univentio. All rts. reserv.

00961557   **Image available**
EFFICIENT IMAGE PARCEL TEXTURE RENDERING WITH T-JUNCTION CRACK ELIMINATION
RENDU EFFICACE DE TEXTURES DE PARCELLES D'IMAGES AVEC ELIMINATION DES
   FISSURES DE JONCTIONS EN T
Patent Applicant/Assignee:
   FLYOVER TECHNOLOGIES INC, R & D Center, 3 Nachal Besor St., 47204 Ramat
      Hasharon, IL, IL (Residence), IL (Nationality)
Inventor(s):
   LEVANON Isaac, 3 Nachal Besor St., 47204 Ramat Hasharn, IL,
   LAVI Yonathan, 21 Bar Ilan St., Raanana, IL,
Legal Representative:
   SANFORD T COLB & CO (et al) (agent), P.O. Box 2273, 76122 Rehovot, IL,
Patent and Priority Information (Country, Number, Date):
   Patent: WO 200295687 A1 20021128 (WO 0295687)
   Application: WO 2001IL1198 20011225 (PCT/WO IL0101198)
   Priority Application: US 2000258465 20001227; US 2000258466 20001227; US
      2000258467 20001227; US 2000258468 20001227; US 2000258488 20001227; US
      2000258489 20001227
Designated States: AU BR BY CA CN CO DE EC IL IN JP KR MX NZ RU SG SI SK ZA
   (EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR
Publication Language: English
Filing Language: English
Fulltext Word Count: 7699

Fulltext Availability:
  Detailed Description

Detailed Description
... the Invention
  [0008] Field of the Invention.

  [0009] The present invention is generally related to the **graphical rendering** of image data over surfaces defined by **polygon meshes** and, in
particular, to a system and methods of efficiently regularizing a
polygon mesh having multiple tessellation levels to support image
parcel texture rendering without visual T-junction artifacts...

  21/3,K/10   (Item 2 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT
(c) 2003 WIPO/Univentio. All rts. reserv.

00909145   **Image available**
**PLANAR LASER ILLUMINATION AND IMAGING (PLIIM) SYSTEMS WITH INTEGRATED
  DESPECKLING MECHANISMS PROVIDED THEREIN**
**SYSTEMES PLIIM D'ILLUMINATION ET D'IMAGERIE AU LASER PLANAIRE A MECANISME
  DE DECHATOIEMENT INTEGRE**
Patent Applicant/Assignee:
  METROLOGIC INSTRUMENTS INC, 90 Coles Road, Blackwood, NJ 08012, US, US
    (Residence), US (Nationality), (For all designated states except: US)
Patent Applicant/Inventor:
  TSIKOS Constantine J, 65 Woodstone Drive, Voorhees, NJ 08043-4749, US, US
    (Residence), US (Nationality), (Designated only for: US)
  KNOWLES Carl Harry, 425 East Linden Street, Morrestown, NJ 08057, US, US
    (Residence), US (Nationality), (Designated only for: US)
  ZHU Xiaoxun, 669 Barton Run Boulevard, Marlton, NJ 08053, US, US
    (Residence), CN (Nationality), (Designated only for: US)
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    , US (Nationality), (Designated only for: US)
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  VATAN Pirooz, 5122 Lexington Ridge Drive, Lexington, MA 02421, US, US
    (Residence), US (Nationality), (Designated only for: US)

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    Blackwood, NJ 08012, US, US (Residence), US (Nationality), (Designated
    only for: US)
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    US (Residence), US (Nationality), (Designated only for: US)
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    (Nationality), (Designated only for: US)
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VAN Tassel John E Jr, 8 Arbor Lane, Winchester, MA 01890, US, US
    (Residence), US (Nationality), (Designated only for: US)
Legal Representative:
PERKOWSKI Thomas J (et al) (agent), Thomas J. Perkowski, Esq., P.C.,
    Soundview Plaza, 1266 East Main Street, Stamford, CT 06902, US,

Claim
... carried out by the PLIIM-based system on a moving bar code symbol or
  other
   graphical structure;
Fig. 113 I is a schematic representation of the first illustrative
  embodiment of the...D space and the points of intersection between these
  pixel rays and a 3-D **polygon - mesh** model of the moving target object
  are computed, and these computed points of intersection used...the number
  of substantially different time-varying speckle-noise pattern samples
  which need to be **generated** per each photo-integration time interval of
  the image detection array can be experimentally determined...

21/3,K/11   (Item 3 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT
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00827931   **Image available**
LIVE PERFORMANCE CONTROL OF COMPUTER GRAPHIC CHARACTERS
COMMANDE EN DIRECT DE PERSONNAGES GRAPHIQUES INFORMATISES
Patent Applicant/Assignee:
  THE JIM HENSON COMPANY, 117 East 69th Street, New York, NY 10021, US, US
    (Residence), US (Nationality)
Inventor(s):
  ROSENBLUTH Steven, 3908-B Heffron Drive, Burbank, CA 91505, US,
  FORBES Jeffrey S, 27046 Rio Prado Drive, Valencia, CA 91354, US,
  MAGILL Timothy, 5732 Calmio Boulevard #7, St. Petersburg, FL 33714, US,
Legal Representative:
  HICKMAN Brian D (et al) (agent), Hickman Palermo Truong & Becker, 1600
    Willow Street, San Jose, CA 95125, US,
Patent and Priority Information (Country, Number, Date):
  Patent: WO 200161447 A1 20010823 (WO 0161447)
  Application: WO 2000US10065 20000413 (PCT/WO US0010065)
  Priority Application: US 2000506679 20000217
Designated States: AU CA JP NZ
  (EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE
Publication Language: English
Filing Language: English
Fulltext Word Count: 19245

Fulltext Availability:
  Detailed Description

Detailed Description
... actuators inside of it, as does an electromechanically actuated
  puppet.

  Before a performance session, 3D **graphics** software 108B is used to
  create and store infort-nation defining one or more characters that may
  be performed by a puppeteer, as indicated by block 12 1. The characters
  that puppeteers perforin are **composed** of a computer **graphic** " **mesh** ".
  The character **meshes** may comprise **polygonal** **meshes** or spline curve
  meshes . Typically 3D graphics software 108B will have two primary means
  by which to move a...

21/3,K/12   (Item 4 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT
(c) 2003 WIPO/Univentio. All rts. reserv.

00820410   **Image available**
SYSTEM AND METHOD FOR DELIVERING RICH MEDIA CONTENT OVER A NETWORK
**SYSTEME ET PROCEDE PERMETTANT DE DELIVRER UN CONTENU RICHE EN INFORMATIONS
    MULTIMEDIA VIA UN RESEAU**
Patent Applicant/Assignee:
  SORCERON INC, 75 9th Avenue Floor 6 East, New York, NY 10011, US, US
    (Residence), US (Nationality), (For all designated states except: US)
Patent Applicant/Inventor:
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  NEMITOFF Adam, 240 Ackerman Avenue, Ridgewood, NJ 07450, US, US
    (Residence), US (Nationality), (Designated only for: US)
  MURAT Altay, 104-13 89th Avenue, Richmond Hill, NY 11418, US, US

(Residence), US (Nationality), (Designated only for: US)
    BANGIA Vishal, 45 River Drive South, Jersey City, NJ 07310, US, US
        (Residence), IN (Nationality), (Designated only for: US)
    GIANGRASSO Steven, 15 Regent Street, Valley Stream, NY 11580, US, US
        (Residence), US (Nationality), (Designated only for: US)
Legal Representative:
    OSTROW Seth H (agent), Brown Raysman Millstein Felder & Steiner LLP, 120
        W. 45th Street, New York, NY 10036, US,
Patent and Priority Information (Country, Number, Date):
    Patent: WO 200153962 A1 20010726 (WO 0153962)
    Application: WO 2001US2224 20010122   (PCT/WO US0102224)
    Priority Application: US 2000177394 20000121; US 2000177395 20000121; US
        2000177396 20000121; US 2000177397 20000121; US 2000177398 20000121; US
        2000177399 20000121; US 2000182434 20000215; US 2000204386 20000515
Designated States: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CU CZ DE
    DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC
    LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI
    SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW
    (EP) AT BE CH CY DE·DK ES FI FR GB GR IE IT LU MC NL PT SE TR
    (OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG
    (AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW
    (EA) AM AZ BY KG KZ MD RU TJ TM
Publication Language: English
Filing Language: English
Fulltext Word Count: 22916

Fulltext Availability:
    Detailed Description

Detailed Description
...   The model may be based on recorded video of an actual set or may be
    generated completely based upon computer **generated   graphical**
    objects. In some embodiments, the virtual set generator includes a 3D
    renderer. 3D Rendering is...transforms that determine where on a 2D plane
    a point in 3D space would project. **Meshes** of **triangles** in 3D space
    represent the surface of objects 5 in the 3D world. Using the...

 21/3,K/13   (Item 5 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT
(c) 2003 WIPO/Univentio. All rts. reserv.

00815142   **Image available**
**METHODS   OF   HIERARCHICAL STATIC SCENE SIMPLIFICATION AND POLYGON BUDGETING
    FOR 3D MODELS**
**PROCEDE   DE   SIMPLIFICATION   DE   SCENE   STATIQUE HIERARCHIQUE ET GESTION DE
    POLYGONES DANS UN MODELE 3D**
Patent Applicant/Assignee:
    INTEL CORPORATION, 2200 Mission College Boulevard, Santa Clara, CA 95052,
        US, US (Residence), US (Nationality), (For all designated states
        except: US)
    INTEL ARCHITECTURE DEVELOPMENT SHANGHAI CO LTD, 6th floor, Beijing Kerry
        Center, North Tower, Guanghua Road 1, Chaoyang District 100020, CN, CN
        (Residence), CN (Nationality), (For all designated states except: US)
Patent Applicant/Inventor:
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        Shanghai 200135, CN, CN (Residence), CN (Nationality), (Designated only
        for: US)
    GUO Baining, 14743 SE 63rd Street, Bellevue, WA 98006, US, CN (Residence)
        , CN (Nationality), (Designated only for: US)
Legal Representative:

CCPIT PATENT AND TRADEMARK LAW OFFICE (agent), 8th floor, Fuchengmenwai
    Street 2, Beijing 100037, CN,
Patent and Priority Information (Country, Number, Date):
    Patent: WO 200148697 A1 20010705 (WO 0148697)
    Application: WO 99CN218 19991223 (PCT/WO CN9900218)
    Priority Application: WO 99CN218 19991223
Designated States: AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE
    ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT
    LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT
    UA UG US UZ VN YU ZA ZW
    (EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE
    (OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG
    (AP) GH GM KE LS MW SD SL SZ TZ UG ZW
    (EA) AM AZ BY KG KZ MD RU TJ TM
Publication Language: English
Filing Language: English
Fulltext Word Count: 8517

Fulltext Availability:
  Detailed Description

Detailed Description
... entertainment. Since recent general purpose graphics WO 01/48697
    PCT/CN99/00218
    2
    cases, a **graphics** subsystem cannot **render** a scene having many
    complicated objects in real-time. A graphics subsystem may attempt to...

...can be displayed more quickly. For example, if an object is initially
    represented by a **mesh** having 10,000 **polygons** , it may be simplified by
    methods known in the art to a representation of the...referring to the
    same embodiment.

An embodiment of the present invention operates within a 3D **graphics**
io application, which **creates** and manages a scene graph stored in a
    graphical database. A scene graph is a...

...3D objects
    present in a scene. The scene graph may comprise multiple complex, highly
    detailed **polygonal** surfaces or **meshes** arranged in a hierarchical
    manner. Figure 1 is a diagram of a sample scene graph...

...an embodiment of the present invention. In this example, scene graph 1 0
    comprises three **polygonal** **meshes** : MO 12, Ml 14, and M2 16, arranged
    in a hierarchy as
    shown. Although this...

  21/3,K/14   (Item 6 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT
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00813280   **Image available**
**ITERATIVE DETERMINATION OF THE SHORTEST PATH BETWEEN TWO POINTS ON A
    POLYGONAL SURFACE**
**DETERMINATION ITERATIVE DU PLUS COURT CHEMIN ENTRE DEUX POINTS SUR UNE
    SURFACE POLYGONALE**
Patent Applicant/Assignee:
  GENERAL ELECTRIC COMPANY, 1 River Road, Schenectady, NY 12345, US, US
    (Residence), US (Nationality)

Inventor(s):
  YAMRON Boris, 32 Oak Tree Lane, Schenectady, NY 12309, US,
  ALYASSIN Abdalmajeid Musa, 88 Crestwood Terrace, Albany, NY 12203, US,
Legal Representative:
  CHASKIN Jay L (et al) (agent), General Electric Company, 3135 Easton
    Turnpike W3C, Fairfield, CT 06431, US,
Patent and Priority Information (Country, Number, Date):
  Patent: WO 200146912 A1 20010628 (WO 0146912)
  Application: WO 2000US33573 20001212 (PCT/WO US0033573)
  Priority Application: US 99469750 19991222
Designated States: DE IL JP
Publication Language: English
Filing Language: English
Fulltext Word Count: 5769

Fulltext Availability:
  Detailed Description

Detailed Description
... object mass, volume, surface area, center of gravity, and moments of
    inertia.

    In the past, **polygonal meshes** were typically comprised of hundreds to
    thousands of polygons, and computer hardware and software has...capturing
    the geometry of the object very precisely, often overwhelm computer
    systems. For example, most **graphics** systems presently are incapable of
    rendering a million polygons at a speed that is not detrimental to
    interactive computation.

    The basic...

 21/3,K/15   (Item 7 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT
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00767723   **Image available**
**METHOD AND APPARATUS FOR THE GENERATION OF COMPUTER GRAPHIC REPRESENTATIONS
    OF INDIVIDUALS**
**PROCEDE ET APPAREIL PERMETTANT DE GENERER DES REPRESENTATIONS GRAPHIQUES
    D'INDIVIDUS PAR ORDINATEUR**
Patent Applicant/Inventor:
  CRAMPTON Stephen James, 9 Broadfields, Goffs Oak, Waltham Cross, Herts
    EN7 5JU, GB, GB (Residence), GB (Nationality)
Legal Representative:
  BERESFORD Keith Denis Lewis, Beresford & Co., 2-5 Warwick Court, High
    Holborn, London WC1R 5DJ, GB
Patent and Priority Information (Country, Number, Date):
  Patent: WO 200101354 A1 20010104 (WO 0101354)
  Application: WO 2000GB2458 20000626 (PCT/WO GB0002458)
  Priority Application: GB 9914823 19990624
Designated States: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ
  DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ
  LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG
  SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW
  (EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE
  (OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG
  (AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW
  (EA) AM AZ BY KG KZ MD RU TJ TM
Publication Language: English
Filing Language: English

Fulltext Word Count: 45335

Fulltext Availability:
  Claims

Claim
  amendments.
  METHOD AND APPARATUS FOR THE **GENERATION**
  OF COMPUTER **GRAPHIC** REPRESENTATIONS OF INDIVIDUALS
  FIELD OF THE INVENTION
  The present invention concerns methods and apparatus
  for **generating** computer **graphical** representations of
  individuals. In particular, the present invention
  concerns the generation of texture rendered wire...

  ...means by which
  computer models of individuals can be generated which may
  be used to **generate** computer **graphical** representations of
  individuals in different poses.
  Embodiments of the present invention provide means
  by which animated sequences of computer **graphical** images
  can be **generated** which are indicative of the movement of
  an individual between a number of different poses...self-test program;
  Figure 16 is a flow diagram illustrating the steps
  involved in the **generation** of a computer **graphical**
  representation of an individual in accordance with the
  first embodiment of the present invention;
  Figure...

  ...Figure 18 is a flow diagram of the steps involved in
  obtaining image data for **generating** a computer **graphical**
  ,representation using the booth of Figure 2;
  Figure 19 is a graph illustrating the timing...

  ...stored in memory;
  Figure 36 is a representation of the data structure
  for a generic **polygon** wire **mesh** for a generic model
  avatar;
  Figure 37 is an illustrative representation of a
   polygonal wire **mesh** of a generic model avatar;
  Figure 38 is a pair of illustrations showing the
  deformation...has been described arranged to utilise the
  avatar data generated by the booth I to **generate** computer
   graphical representations of individuals in any of a
  plurality of poses. In this embodiment the avatar...varying
  levels of details for use in different applications, Thus
  for example avatars having a **polygonal** **mesh** of 2600
   polygons could be generated for use in some software with
  a **polygonal** **mesh** of 10,000 or 40,000 polygons being used
  for other applications, The model. avatar...

 21/3,K/16   **(Item 8 from file: 349)**

00740874   **Image available**
**DEVICE, METHOD, AND SYSTEM FOR GENERATING PER-PIXEL LIGHT VALUES USING
    TEXTURE PARAMETERS**
DISPOSITIF, PROCEDE ET SYSTEME PERMETTANT DE GENERER DES VALEURS DE

LUMINOSITE PAR PIXEL AU MOYEN DE PARAMETRES DE TEXTURE
Patent Applicant/Assignee:
  SILICON GRAPHICS INC, Intellectual Property-Legal Services, 1600
    Amphitheatre Parkway, M/S 710, Mountainview, CA 94043-1351, US, US
    (Residence), US (Nationality)
Inventor(s):
  TANNENBAUM David C, 985 Foxchase Drive #654, San Jose, CA 95123, US
  PEERCY Mark, 7491 Tiptoe Lane, Cupertino, CA 95014, US
  BLYTHE David, 3314 Brittan Avenue #2, San Carlos, CA 94070, US
  AIREY John Milligan, 340 Vincent Drive, Mountainview, CA 94041, US
Legal Representative:
  FISH Charles S, Baker Botts L.L.P., 2001 Ross Avenue, Dallas, TX
    75201-2980, US
Patent and Priority Information (Country, Number, Date):
  Patent: WO 200054225 A1 20000914 (WO 0054225)
  Application: WO 2000US6184 20000308   (PCT/WO US0006184)
  Priority Application: US 99265493 19990309
Designated States: CN JP
  (EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE
Publication Language: English
Filing Language: English
Fulltext Word Count: 6987

Fulltext Availability:
  Detailed Description

Detailed Description
... images (e.g. , two- or three
  dimensional images) is one of the main goals of **graphics**
  system designers. **Rendering** images of real or imaginary
  objects typically involves generating geometric models
  (e.g., polygons) of...

...to polygonal surfaces. In computer graphics, surfaces of
  an object are generally modeled by a **polygonal   mesh** ,
  which is a collection of vertices, edges, and/or
  polygons . A **mesh** of **polygons** may be produced f rom a
  variety of sources such as an application, tesselated
  NURDS...

 21/3,K/17   (Item 9 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT
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00733766   **Image available**
METHOD AND APPARATUS FOR 3D MODEL CREATION BASED ON 2D IMAGES
PROCEDE ET APPAREIL DE CREATION DE MODELES 3D SUR LA BASE D'IMAGES 2D
Patent Applicant/Assignee:
  ISURFTV, Suite 307, 1975 El Camino Real West, Mountain View, CA 94040, US
    , US (Residence), US (Nationality)
Inventor(s):
  KAMEN Yakov, 19334 Greenwood Drive, Cupertino, CA 95014, US
  SHIRMAN Leon, 870 Seminole Way, Redwood City, CA 94062, US
Legal Representative:
  LEEDS Kenneth, P.O. Box 2819, Sunnyvale, CA 94087-0819, US
Patent and Priority Information (Country, Number, Date):
  Patent: WO 200046753 A1 20000810 (WO 0046753)
  Application: WO 2000US2786 20000202   (PCT/WO US0002786)
  Priority Application: US 99118508 19990203; US 99361470 19990727
  (EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE

Publication Language: English
Filing Language: English
Fulltext Word Count: 8995

Fulltext Availability:
  Detailed Description

Detailed Description
... Windows.

   in one embodiment, a user sets up the flat geometric surface (for
   example, a **triangle** **mesh**) in the Direct 3D windows environment. The
   set of instructions is then provided to the **graphics** pipeline, which
   finishes the **rendering** process. However, in another embodiment, the PC
   comprises a bypass mechanism that permits one to...control points in the
   Z direction in accordance with that change of color, the resulting **mesh**
   of **polygons** will more accurately match the object whose image is being
   rendered . If the 3D **graphics** pipeline is called upon to prepare an
   image oCthat object from a different angle, that...

   21/3,K/18   (Item 10 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT
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00731952   **Image available**
ADAPTIVE SUBDIVISION OF MESH MODELS
SUBDIVISION ADAPTATIVE DE MODELES A MAILLE
Patent Applicant/Assignee:
  METACREATIONS CORPORATION, 6303 Carpenteria Avenue, Carpenteria, CA 93013
    , US, US (Residence), US (Nationality)
Inventor(s):
  MIGDAL Alexander A, 685 Cherry Valley Road, Princeton, NJ 08540, US
  LEBEDEV Alexei, 685 Cherry Valley Road, Princeton, NJ 08540, US
  PASKHAVER Victor, 1908 Quail Ridge Drive, Plainsboro, NJ 08536, US
Legal Representative:
  FLOCK John (et al) (agent), Kenyon & Kenyon, One Broadway, New York, NY
    10004, US,
Patent and Priority Information (Country, Number, Date):
  Patent: WO 200045283 A1 20000803 (WO 0045283)
  Application: WO 2000US2176 20000127 (PCT/WO US0002176)
  Priority Application: US 99238232 19990127
Designated States: AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK
  DM EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR
  LS LT LU LV MA MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ
  TM TR TT TZ UA UG UZ VN YU ZA ZW
  (EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE
  (OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG
  (AP) GH GM KE LS MW SD SL SZ TZ UG ZW
  (EA) AM AZ BY KG KZ MD RU TJ TM
Publication Language: English
Filing Language: English
Fulltext Word Count: 14782

Fulltext Availability:
  Detailed Description

Detailed Description
... and sending the subdivided triangles (those triangles which will not
   be further subdivided) to the **rendering** computer's **graphics** pipeline

one by one, immediately releasing memory after these triangles are
rendered. (Alternatively, infon-nation...

...until the triangle adjacent to it have been subdivided. For example,
   Fig. 5 shows four **triangles** 60-63 of a **mesh** model that has yet to be
   subdivided (i.e. there are I 0 one base **mesh** **triangles**). In Fig. 5
   the first triangle to be subdivided is triangle 60. Based on the...

 21/3,K/19   (Item 11 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT

00538791   **Image available**
COMPUTER GRAPHICS ANIMATION METHOD AND DEVICE
PROCEDE ET DISPOSITIF D'ANIMATION INFOGRAPHIQUE
Patent Applicant/Assignee:
  KONINKLIJKE PHILIPS ELECTRONICS N V,
  PHILIPS AB,
Inventor(s):
  BRUIJNS Johannes,
  VAN OVERVELD Cornelis W A M,
Patent and Priority Information (Country, Number, Date):
   Patent: WO 200002164 A2 20000113 (WO 0002164)
   Application: WO 99IB1137 19990617 (PCT/WO IB9901137)
   Priority Application: EP 98202214 19980701
Designated States: CN JP KR AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL·
   PT SE
Publication Language: English
Fulltext Word Count: 4075

Fulltext Availability:
  Claims
Claim
... from the first and second mesh of control points comerpoints of a
   first and second **mesh** of flat **triangles** respectively, the first and
   second **mesh** of flat **triangles** approximating the surfaces defined by
   the first and second coordinate valued functions respectively, surfaces
   defined by said **mesh** of flat **triangles** being **rendered** .

   3 A computer **graphics** animation method according to Claim 2, wherein
   viewing transformations are applied to the first and... ʿ

 21/3,K/20   (Item 12 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT

00533609   **Image available**
METHOD AND SYSTEM FOR CAPTURING AND REPRESENTING 3D GEOMETRY, COLOR AND
    SHADING OF FACIAL EXPRESSIONS
PROCEDE ET SYSTEME DE CAPTURE ET DE REPRESENTATION DE GEOMETRIE 3D, COULEUR
    ET CONTRASTE D'EXPRESSIONS FACIALES
Patent Applicant/Assignee:
  MICROSOFT CORPORATION,
Inventor(s):
  GUENTER Brian,
  GRIMM Cindy Marie,
  MALVAR Henrique Sarmento,
Patent and Priority Information (Country, Number, Date):

```
Patent:                WO 9964961 A1 19991216
Application:           WO 99US12725 19990607  (PCT/WO US9912725)
Priority Application: US 9893590 19980608
```
Designated States: AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE
ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT
LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT
UA UG UZ VN YU ZA ZW GH GM KE LS MW SD SL SZ UG ZW AM AZ BY KG KZ MD RU
TJ TM AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE BF BJ CF CG
CI CM GA GN GW ML MR NE SN TD TG
Publication Language: English
Fulltext Word Count: 17984

Fulltext Availability:
  Detailed Description

Detailed Description
... actor's face was digitized using a Cyberware scanner, a conventional
   system used in 3D **graphics** for **generating** a 3D model of a 3D object.
   This scan was used to create the base...

...the positions of the tracked dots. In this particular case, the 3D model
   was a **polygonal** **mesh** comprising an array of vertices, each specified
   in terms of coordinates in a 3D coordinate...rendering pipeline by
   converting pixel intensity values to analog signals scanned across the
   display. Some **graphics** workstations include additional **rendering**
   devices such as a **graphics** - 41 accelerator that plugs into an
   expansion slot on the computer or a **graphics** **rendering** chip set that
   is connected to the processor and memory via the bus structure on the
   mother board. Such **graphics** **rendering** hardware accelerates image
   generation , typically by using special purpose hardware to scan convert
   geometric primitives such as the **polygons** of the base **mesh** .
   The computer 320 may operate in a networked environment using logical
   connections to one or...

 21/3,K/21   **(Item 13 from file: 349)**
DIALOG(R)File 349:PCT FULLTEXT
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00514150   **Image available**
SUBSAMPLED TEXTURE EDGE ANTIALIASING
ANTICRENELAGE DES CONTOURS DE TEXTURES SOUS-ECHANTILLONNEES
Patent Applicant/Assignee:
  SILICON GRAPHICS INC,
Inventor(s):
  VAN HOOK Timothy,
  DELAURIER Anthony,
Patent and Priority Information (Country, Number, Date):
```
Patent:                WO 9945502 A1 19990910
Application:           WO 99US3816 19990223  (PCT/WO US9903816)
Priority Application: US 9835376 19980305
```
Designated States: JP AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE
Publication Language: English
Fulltext Word Count: 5798

Fulltext Availability:
  Detailed Description

Detailed Description
... the computer graphics

system 100 to render antialiased texture edges within a polygon for
display.

   Rendering realistic images in a 3D **graphics** computer system
necessitates
modeling of surfaces. A common surface modeling method is the **polygon**
 mesh technique. A **polygon** **mesh** is a collection of edges, vertices,
and
polygons connected such that each edge is shared...

 21/3,K/22   (Item 14 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT
(c) 2003 WIPO/Univentio. All rts. reserv.

00507956   **Image available**
3D MESH COMPRESSION AND CODING
COMPRESSION ET CODAGE DE RESEAU MAILLE TRIDIMENSIONNEL
Patent Applicant/Assignee:
  LI Jiankun,
  KUO Chung-Chieh Jay,
Inventor(s):
  LI Jiankun,
  KUO Chung-Chieh Jay,
Patent and Priority Information (Country, Number, Date):
  Patent: WO 9939308 A1 19990805
  Application: WO 99US1846 19990129 (PCT/WO US9901846)
  Priority Application: US 9873087 19980130; US 98127053 19980731
Designated States: AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES
  FI GB GE GH GM HR HU ID IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD
  MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG UZ
  VN YU ZW GH GM KE LS MW SD SZ UG ZW AM AZ BY KG KZ MD RU TJ TM AT BE CH
  CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA GN GW
  ML MR NE SN TD TG
Publication Language: English
Fulltext Word Count: 9658
Fulltext Availability:
  Detailed Description

Detailed Description
... is also O(n) as discussed in Bar-Yehuda et al., "Time/Space Tradeoffs
  for **Polygon** **Mesh** **Rendering** ," ACM Transactions on **Graphics** , Vol.
  15, pp. 141 52, April 1996, and in Heekbert et al., "Multiresolution
  Modeling for Fast **Rendering** ," Proceedings of **Graphics** Interface '94,
  pp. 43 -5 0, Canadian Information Processing Society, May 1994. The
  disclosure of...

 21/3,K/23   (Item 15 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT
(c) 2003 WIPO/Univentio. All rts. reserv.

00475610   **Image available**
REALISTIC SURFACE SIMULATION IN COMPUTER ANIMATION
SIMULATION REALISTE DE SURFACE EN ANIMATION INFORMATIQUE
Patent Applicant/Assignee:
  PIXAR ANIMATION STUDIOS,
Inventor(s):
  DEROSE Anthony David,
  KASS Michael,

Patent and Priority Information (Country, Number, Date):
  Patent: WO 9906962 A1 19990211
  Application: WO 98US15702 19980729 (PCT/WO US9815702)
  Priority Application: US 97905436 19970804
Designated States: AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES
  FI GB GE GH GM HR HU ID IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD
  MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG UZ
  VN YU ZW GH GM KE LS MW SD SZ UG ZW AM AZ BY KG KZ MD RU TJ TM AT BE CH
  CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA GN GW
  ML MR NE SN TD TG
Publication Language: English
Fulltext Word Count: 8661
Fulltext Availability:
  Detailed Description

Detailed Description
... No. 08/905,43 5, filed August 4,
  1997 and titled: "HYBRID SUBDIVISION IN COMPUTER **GRAPHICS** ".

  BACKGROUND OF THE INVENTION
  To **create** a three dimensional computer animation, the animator must
  move three dimensional objects and characters about...

  ...point mesh contains sufficient information to recreate the model using
  either B-Spline patches, a **polygon mesh** , or recursive subdivision
  surfaces, in sufficient detail to produce a high quality rendered image.

  In...

  21/3,K/24   (Item 16 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT
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00475606   **Image available**
**TEXTURE MAPPING AND OTHER USES OF SCALAR FIELDS ON SUBDIVISION SURFACES IN
    COMPUTER GRAPHICS AND ANIMATION**
**TEXTURAGE ET AUTRES UTILISATIONS DE CHAMPS SCALAIRES SUR DES SURFACES DE
    SUBDIVISION DANS DES GRAPHIQUES ET DES ANIMATIONS INFORMATIQUES**
Patent Applicant/Assignee:
  PIXAR ANIMATION STUDIOS,
Inventor(s):
  DeROSE Anthony David,
  KASS Michael,
  TRUONG Tien Gia,
Patent and Priority Information (Country, Number, Date):
  Patent: WO 9906958 A1 19990211
  Application: WO 98US15703 19980729 (PCT/WO US9815703)
  Priority Application: US 97905434 19970804
Designated States: AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES
  FI GB GE GH GM HR HU ID IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD
  MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG UZ
  VN YU ZW GH GM KE LS MW SD SZ UG ZW AM AZ BY KG KZ MD RU TJ TM AT BE CH
  CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA GN GW
  ML MR NE SN TD TG
Publication Language: English
Fulltext Word Count: 8299

Fulltext Availability:
  Detailed Description

Detailed Description
...   smooth surfaces of
  arbitrary topology, subdivision surfaces have not been widely adopted in
  CAD, computer **graphics** or computer **generated** animation. One reason
  that they have not been more widely embraced is that unlike NURB... ·
  computer graphics and animation for a way to define smoothly varying
  scalar fields on arbitrary **polygonal   meshes** and surfaces defined by
  their subdivision which can serve as local surface parameters.

  SUMMARY OF...

 21/3,K/25   (Item 17 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT
(c) 2003 WIPO/Univentio. All rts. reserv.

00466836   **Image available**
COMPUTER·GRAPHICS METHOD AND DEVICE
PROCEDE ET DISPOSITIF D'INFOGRAPHIE
Patent Applicant/Assignee:
  KONINKLIJKE PHILIPS ELECTRONICS N V,
  PHILIPS AB,
Inventor(s):
  BRUIJNS Johannes,
Patent and Priority Information (Country, Number, Date):
  Patent: WO 9857301 A1 19981217
  Application: WO 98IB591 19980420   (PCT/WO IB9800591)
  Priority Application: NL 97201786 19970613
Designated States: JP AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE
Publication Language: English
Fulltext Word Count: 7236

Fulltext Availability:
  Claims

Claim
  A computer **graphics   rendering** method comprising the steps of
  - defining a curved surface patch in terms of a description...

...of
  segmentation points and the set of grid points map;
  - rendering an image of a **mesh** of flat **triangles** , nodes of the **mesh**
  having the coordinates of
  respective points in the set of mapped points;
  characterized in that...least no more than any other of the at least two
  method being selected for **generating** the triangles.

  8 A computer **graphics   rendering** device comprising
  - a memory for storing a definition of a curved surface patch in terms...

...and the set of grid points map; - rendering means for rendering an image
  of a **mesh** of flat **triangles** , nodes of the **mesh**
  having the coordinates of respective points in the set of mapped points;
  characterized in that...

 21/3,K/26   (Item 18 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT
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00453990
METHOD AND SYSTEM FOR VIEW-DEPENDENT REFINEMENT OF PROGRESSIVE MESHES
PROCEDE ET SYSTEME D'AFFINEMENT PAR VUE DE MAILLES PROGRESSIVES
Patent Applicant/Assignee:
  MICROSOFT CORPORATION,
Inventor(s):
  HOPPE Hugues H,
Patent and Priority Information (Country, Number, Date):
  Patent: WO 9844454 A2 19981008
  Application: WO 98US6623 19980402   (PCT/WO US9806623)
  Priority Application: US 97826570 19970403
Designated States: CA JP AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT
  SE
Publication Language: English
Fulltext Word Count: 20549

Fulltext Availability:
  Detailed Description

Detailed Description
...   THE INVENTION
  Rendering complex geometric models at interactive rates is a challenging
  problem in computer **graphics** . While **rendering** performance is
  continually improving, significant gains can be obtained by adapting the
  complexity of a geometric model to the contribution the model makes to a
  specific **rendered graphical** image. Within traditional modeling
  systems known in the computer **graphics** art, detailed geometric models
  are **created** by applying versatile modeling operations (e.g., extrusion,
  constructive solid geometry, and freeform deformations) to...

...other multi-sided shapes. For efficient display, the resulting geometric
  models are typically transformed into **polygonal** approximations of
  geometric ·
  primitives called " **meshes** ."
  A mesh has a geometry denoted by a tuple (K, V) where K is a...

. ...ACM SIGGRAPH'93 Proceedings, pp. 19 Many geometric models in computer
  graphics are represented using **triangle meshes** .

  Geometrically, a **triangle mesh** is a piecewise linear surface with
  multiple triangular faces joined together at their edges. One common
  technique for using meshes to display a **graphical** object or image is to
   create several versions of a geometric model at various Levels Of
  Detail (LOD) using progressive meshes...models for a graphical image
  containing one or more graphical objects are typically transformed into
  polygonal approximations of geometric primitives called " **meshes** ." A
  mesh has a geometry denoted by a tuple (K, V) where K is a...

...R' @ R3 is a linear map. One common technique for using meshes to
  display a **graphical** object is to **create** several versions of a
  geometric model at various view-independent Levels Of Detail (LOD) using
  ...and MB . The smooth transition helps eliminate jerky or abrupt
  transitions called "popping" when the **meshes** are viewed.

  Triangle Strips
  Many **graphics** systems **create** triangle strip representations of
  graphical images for optimal **rendering** performance. A triangle strip
  is a sequence of connected triangles with adjacent faces.

  FIG. 20...almost any underlying geometric model used to display a

graphical image. The resulting adaptively refined **mesh** that requires fewer **polygons** for a desired level of approximation than other refinement schemes known in the art. As...

...mesh that are not visible by a viewer under selected view conditions which allows the **graphical** image to be **rendered** using fewer computer resources. Adaptively refined meshes can be also used to for progressive transmission...

21/3,K/27   (Item 19 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT
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00453981
METHOD AND SYSTEM FOR ADAPTIVE REFINEMENT OF PROGRESSIVE MESHES
PROCEDE ET SYSTEME POUR L'AFFINEMENT ADAPTATIF DE RESEAUX QUADRILLES
    PROGRESSIFS
Patent Applicant/Assignee:
  MICROSOFT CORPORATION,
Inventor(s):
  HOPPE Hugues H,
Patent and Priority Information (Country, Number, Date):
  Patent: WO 9844445 A2 19981008
  Application: WO 98US6692 19980402   (PCT/WO US9806692)
  Priority Application: US 97826573 19970403
Designated States: CA JP AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT
  SE
Publication Language: English
Fulltext Word Count: 18144

Fulltext Availability:
  Detailed Description

Detailed Description
... THE INVENTION
  Rendering complex geometric models at interactive rates is a challenging
  problem in computer **graphics** . While **rendering** performance is
  continually improving, significant gains can be obtained by adapting the
  complexity of a geometric model to the contribution the model makes to a
  specific **rendered graphical** image. Within traditional modeling
  systems known in the computer **graphics** art, detailed geometric models
  are **created** by applying versatile modeling operations (e.g., extrusion,
  constructive solid geometry, and freeform deformations) to...

...other mullet-sided shapes. For efficient display, the resulting
  geometric models are typically transformed into **polygonal**
  approximations of geometric
  primitives called " **meshes** ."
  A mesh has a geometry denoted by a tuple (K, V) where K is a...

...ACM SIGGRAPH'93 Proceedings, pp. 19 Many geometric models in computer
  graphics are represented using **triangle   meshes** .

  Geometrically, a **triangle   mesh** is a piecewise linear surface with
  multiple triangular faces joined together at their edges. One common
  technique for using meshes to display a **graphical** object or image is to
   create several versions of a geometric model at various Levels Of
  Detail (LOD) using progressive meshes...models for a graphical image
  containing one or more graphical objects are typically transformed into

polygonal approximations of geometric primitives called " **meshes** ." A mesh has a geometry denoted by a tuple (K, V) where K is a...

...R 3 is a linear map. One common technique for using meshes to display a **graphical** object is to **create** several versions of a geometric model at various view-independent Levels Of Detail (LOD) using...and M'. The smooth transition helps eliminate jerky or abrupt transitions called "popping" when the **meshes** are viewed.

Triangle Strips
Many **graphics** systems **create** triangle strip representations of **graphical** images for optimal **rendering** performance. A triangle strip is a sequence of connected triangles with adjacent faces. FIG. 20... almost any underlying geometric model used to display a graphical image. The resulting adaptively refined **mesh** that requires fewer **polygons** for a desired level of approximation than other refinement schemes known in the art. As...

...mesh that are not visible by a viewer under selected view conditions which allows the **graphical** image to be **rendered** using fewer computer resources. Adaptively refined meshes can be also used to for progressive transmission...

21/3,K/28 (Item 20 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT
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00437051
2-D MESH GEOMETRY AND MOTION VECTOR COMPRESSION
GEOMETRIE DE TRAME BIDIMENSIONNELLE ET COMPRESSION DU VECTEUR D'ANIMATION
Patent Applicant/Assignee:
  SHARP KABUSHIKI KAISHA,
Inventor(s):
  VAN BEEK Petrus J L,
  TEKALP Ahmet Murat,
Patent and Priority Information (Country, Number, Date):
  Patent: WO 9827515 A1 19980625
  Application: WO 97JP4607 19971215 (PCT/WO JP9704607)
  Priority Application: US 9633011 19961216; US 97942313 19971001
Designated States: CN JP KR SG AT BE CH DE DK ES FI FR GB GR IE IT LU MC NL
  PT SE
Publication Language: English
Fulltext Word Count: 11462

Fulltext Availability:
  Detailed Description

Detailed Description
... node points, from which a continuous, piece-wise affine motion field can be reconstructed.

3D **polygon** **meshes** have long been used for efficient 3D object geometry
modeling and **rendering** in computer **graphics** . Equations similar to parametric mappings used in mesh-based motion modeling ...in 3D graphics to perform texture mapping, a popular procedure to render natural images on **polygon** **meshes** describing graphic objects for photo-realistic synthesized images. Texture mapping in 3D graphics is realized...

...a pixel position on a 2D image)
  6
  to every 3D node point on the **polygonal** **mesh** . Thus, each **polygonal**
  surface element on the 3D **mesh** is associated with a patch of the 2D
  image, which is then rendered on the **polygon** **mesh** subject to proper
  warping transformation. An animation may be created by rendering the same
  image...

 21/3,K/29   **(Item 21 from file: 349)**
DIALOG(R)File 349:PCT FULLTEXT
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00429954   **Image available**
PROCESS CONTROL
COMMANDE DE PROCEDE
Patent Applicant/Assignee:
  CYBERLIFE TECHNOLOGY LIMITED,
  GRAND Stephen Lewis,
Inventor(s):
  GRAND Stephen Lewis,
Patent and Priority Information (Country, Number, Date):
  Patent: WO 9820418 A1 19980514
  Application: WO 96GB2703 19961105   (PCT/WO GB9602703)
  Priority Application: WO 96GB2703 19961105
Designated States: AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES
  FI GB GE HU IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW
  MX NO NZ PL PT RO RU SD SE SG SI SK TJ TM TR TT UA UG US UZ VN KE LS MW
  SD SZ UG AM AZ BY KG KZ MD RU TJ TM AT BE CH DE DK ES FI FR GB GR IE IT
  LU MC NL PT SE BF BJ CF CG CI CM GA GN ML MR NE SN TD TG
Publication Language: English
Fulltext Word Count: 20197

Fulltext Availability:
  Detailed Description

Detailed Description
... Often the system will be used in both modes.

  The output from the system is **rendered** , textured 3D **graphics** and
  stereo
  sound. Each object in the simulation can have its own 3D **polygon**   **mesh**
  , and thus complex objects can be constructed from several articulated or
  otherwise connected parts, each...three-dimensional graphics. Each cell
  can optionally contain graphical and geographical information, and thus
  be **rendered** to the screen. The **graphical** information is in the form
  of a textured **polygon** **mesh** (possibly two separate **meshes** , if the
  object needs to be visible from both inside and outside).

  Each polygon may...

 21/3,K/30   **(Item 22 from file: 349)**
DIALOG(R)File 349:PCT FULLTEXT
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00306530
INTEGRATING TEXTURE MEMORY AND INTERPOLATION LOGIC
PROCEDE D'INTEGRATION DE MEMOIRE DE TEXTURES ET DE LOGIQUE D'INTERPOLATION
Patent Applicant/Assignee:

SILICON GRAPHICS INC,
Inventor(s):
  HANNAH Marc R,
  NAGY Michael B,
Patent and Priority Information (Country, Number, Date):
  Patent: WO 9524682 A1 19950914
  Application: WO 95US2853 19950307   (PCT/WO US9502853)
  Priority Application: US 94206959 19940307
Designated States: JP KR AT BE CH DE DK ES FR GB GR IE IT LU MC NL PT SE
Publication Language: English
Fulltext Word Count: 6358

Fulltext Availability:
  Detailed Description

Detailed Description
... invention may be practiced is shown as 100,
  System 100 can include any computer controlled **graphics** systems
  for **generating** complex or three-dimensional images, such as the
  IRISTM family of computers manufactured by Silicon...scan
  conversion subsystem then generates pixel data based on the
  primitives (e.g., points, lines, **polygons** , and **meshes**) from the
  geometry subsystem. The pixel data is sent to the raster
  subsystem, whereupon z...

 21/3,K/31   (Item 23 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT
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00163870
REDUCING STEREOLITHOGRAPHIC PART DISTORTION THROUGH ISOLATION OF STRESS
REDUCTION DE LA DISTORSION STEREOLITHOGRAPHIQUE DE PIECES PAR ISOLATION DES
    CONTRAINTES
Patent Applicant/Assignee:
  3D SYSTEMS INC,
Inventor(s):
  SMALLEY Dennis Rollette,
Patent and Priority Information (Country, Number, Date):
  Patent: .   WO 8910255 A1 19891102
  Application: WO 89US1560 19890417   (PCT/WO US8901560)
  Priority Application: US 8815 19880418
Designated States: JP KR
Publication Language: English
Fulltext Word Count: 41237

Fulltext Availability:
  Claims

Claim
... with the boundaries on the previous layer.
  The present invention harnesses the principles of
  computer **generated** **graphics** in combination with
  stereolithography, i,e., the application of lithographic
  techniques to the pr.oduction...include photographic reproduction,
  xerography, and
  microlithography, as is used in the production of
  microelectronics. Computer **generated** **graphics** displayed
  on a plotter or a cathode ray tube are also forms of
  lithography, where...

...technologies.
   A prime object of the present invention is to harness
   the principles of computer - **generated   graphics** ,, combined
   with UV curable plastic and the like, to simultaneously
   execute CAD and CAM,, and...One form,, as previously indicated consists
   of
   representing the surface of an object as a **mesh** of
    triangles (PHIGS). These **triangles** completely form the
   inner and outer surfaces of the object* This CAD
   representation also includes...

 21/3,K/32   (Item 24 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT
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00163864
METHODS FOR CURING PARTIALLY POLYMERIZED PARTS
PROCEDE DE DURCISSEMENT DE PIECES PARTIELLEMENT POLYMERISEES
Patent Applicant/Assignee:
   3D SYSTEMS INC,
Inventor(s):
   MODREK Borzo,
   PARKER Brent,
   SPENCE Stuart Thomas,
Patent and Priority Information (Country, Number, Date):
   Patent: WO 8910249 A1 19891102
   Application: WO 89US1562 19890417 (PCT/WO US8901562)
   Priority Application: US 8816 19880418; US 88429 19881108
Designated States: JP KR
Publication Language: English
Fulltext Word Count: 62732

Fulltext Availability:
   Claims

Claim
   ... reproduction, xerography, and microlithography, as is used in the
   production of microelec
   aS tronics; Computer **generated   graphics** displayed on a
   plotter or a cathode ray tube are also f orms of litho...

...of the technology relating to the
   present invention is to harness the principles of computer
    generated   graphics , combined with in curable plastic and
   the like, to simultaneously execute CAD and CAM, ...as previously
   indicated, consists of represent
   ing-s the surface of an object as a **mesh** of **triangles**
   (PHIGS). These **triangles** completely form. the inner and
   outer surfaces of the object,,, This CAD representation
   also includes...
?

DIALOG(R)File 349:PCT FULLTEXT

00767723   **Image available**
METHOD AND APPARATUS FOR THE GENERATION OF COMPUTER GRAPHIC REPRESENTATIONS OF INDIVIDUALS
PROCEDE ET APPAREIL PERMETTANT DE GENERER DES REPRESENTATIONS GRAPHIQUES D'INDIVIDUS PAR ORDINATEUR
Patent Applicant/Inventor:
  CRAMPTON Stephen James, 9 Broadfields, Goffs Oak, Waltham Cross, Herts
    EN7 5JU, GB, GB (Residence), GB (Nationality)
Legal Representative:
  BERESFORD Keith Denis Lewis, Beresford & Co., 2-5 Warwick Court, High
    Holborn, London WC1R 5DJ, GB
Patent and Priority Information (Country, Number, Date):
  Patent: WO 200101354 A1 20010104 (WO 0101354)
  Application: WO 2000GB2458 20000626 (PCT/WO GB0002458)
  Priority Application: GB 9914823 19990624
Designated States: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ
    DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ
    LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG
    SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW
    (EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE
    (OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG
    (AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW
    (EA) AM AZ BY KG KZ MD RU TJ TM
Publication Language: English
Filing Language: English
Fulltext Word Count: 45335

Fulltext Availability:
  Claims

Claim
  amendments.
  METHOD AND APPARATUS FOR THE **GENERATION**
  OF COMPUTER **GRAPHIC** REPRESENTATIONS OF INDIVIDUALS
  FIELD OF THE INVENTION
  The present invention concerns methods and apparatus
  for **generating** computer **graphical** representations of
  individuals. In particular, the present invention
  concerns the generation of texture rendered wire...

  ...means by which
  computer models of individuals can be generated which may
  be used to **generate** computer **graphical** representations of
  individuals in different poses.
  Embodiments of the present invention provide means
  by which animated sequences of computer **graphical** images
  can be **generated** which are indicative of the movement of
  an individual between a number of different poses...self-test program;
  Figure 16 is a flow diagram illustrating the steps
  involved in the **generation** of a computer **graphical**
  representation of an individual in accordance with the
  first embodiment of the present invention;
  Figure...

  ...Figure 18 is a flow diagram of the steps involved in
  obtaining image data for **generating** a computer **graphical**

,representation using the booth of Figure 2;
Figure 19 is a graph illustrating the timing...

...an individual in
profile;
Figure 26 is a representation of an outline
generated from a **silhouette** corresponding to the example
of Figure 20 on which a number of landmark points are...
...stored in memory;
Figure 36 is a representation of the data structure
for a generic **polygon** wire **mesh** for a generic model
avatar;
Figure 37 is an illustrative representation of a
polygonal wire **mesh** of a generic model avatar;
Figure 38 is a pair of illustrations showing the
deformation...has been described arranged to utilise the
avatar data generated by the booth I to **generate** computer
graphical representations of individuals in any of a
plurality of poses. In this embodiment the avatar...which only a single
image
is obtained of the user in each pose with a **silhouette** of
the user being calculated from a single image. Methods of
generating silhouettes from a...function transforming a single generic
model of an avatar from outline data calculated from a
silhouette , it will be appreciated that any form scanning
means for scanning in data could be...varying
levels of details for use in different applications, Thus
for example avatars having a **polygonal** **mesh** of 2600
polygons could be generated for use in some software with
a **polygonal** **mesh** of 10,000 or 40,000 polygons being used
for other applications, The model. avatar...

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